WHAT IS CLAIMED IS:

1. A peptide selected from the group consisting of SEQ ID NOs: 2, 4, 6, 8, 10 and 12.

2. The peptide of claim 1, wherein the peptide is a linear peptide or a cyclic peptide.

3. A peptide comprising an amino acid sequence selected from the group consisting of SEQ ID NOs: 2, 4, 6, 8, 10, and 12, the peptide being no more than 50 amino acid residues in length.

4. The peptide of claim 3, wherein the peptide is a linear peptide or a cyclic peptide.

5. A peptide comprising an amino acid sequence as set forth in SEQ ID NO:13, 27 or 32, the peptide being at least 6 and no more than 50 amino acid residues in length.

6. The peptide of claim 5, wherein the peptide is selected from the group consisting of SEQ ID NOs: 2, 6, 8, and 12.

7. The peptide of claim 5, wherein the amino acid sequence is selected from the group consisting of SEQ ID NOs: 2, 6, and 12.

8. The peptide of claim 5, wherein the peptide is a linear peptide or a cyclic peptide.

9. A composition-of-matter comprising at least two peptides, each independently selected from the group consisting of SEQ ID NOs: 2, 4, 6, 8, 10, and 12.

10. A pharmaceutical composition comprising a therapeutically effective amount of a peptide having an amino acid sequence as set forth in SEQ ID NO:13, 27 or 32, said peptide being at least 6 and no more than 50 amino acid residues in length and a pharmaceutically acceptable carrier or diluent.

11. The pharmaceutical composition of claim 10, wherein said peptide is selected from the group consisting of SEQ ID NOs: 2, 6, and 12.

12. The pharmaceutical composition of claim 10, wherein said amino acid sequence is selected from the group consisting of SEQ ID NOs: 2, 6, and 12.

13. The pharmaceutical composition of claim 10, wherein said peptide is a linear peptide or a cyclic peptide.

14. A pharmaceutical composition comprising a therapeutically effective amount of a peptide selected from the group consisting of SEQ ID NOs: 2, 4, 6, 8, 10, and 12 and a pharmaceutically acceptable carrier or diluent.

15. A pharmaceutical composition comprising a therapeutically effective amount of a peptide having an amino acid sequence selected from the group consisting of SEQ ID NOs: 2, 4, 6, 8, 10, and 12, said peptide being no more than 50 amino acid residues in length and a pharmaceutically acceptable carrier or diluent.

16. A method of promoting angiogenesis in a tissue of a subject, the method comprising providing to the subject, a therapeutically effective amount of a peptide having an amino acid sequence as set forth in SEQ ID NO:13, 27 or 32, said peptide being at least 6 and no more than 50 amino acid residues in length, to thereby promote angiogenesis in the subject.

17. The method of claim 16, wherein said peptide is selected from the group consisting of SEQ ID NOs: 2, 6, and 12.

18. The method of claim 16, wherein said amino acid sequence is selected from the group consisting of SEQ ID NOs: 2, 6, and 12.

19. The method of claim 16, wherein said peptide is a linear peptide or a cyclic peptide.

20. The method of claim 16, wherein the subject suffers from arteriosclerosis, retinopathy, remodeling disorder, von Hippel-Lindau syndrome, diabetes and/or hereditary hemorrhagic telengiectasia.

21. A method of promoting angiogenesis in a tissue of a subject, the method comprising providing to the subject, a therapeutically effective amount of a peptide selected from the group consisting of SEQ ID NOs: 2, 4, 6, 8, 10 and 12, to thereby promote angiogenesis in the subject.

22. The method of claim 21, wherein the subject suffers from arteriosclerosis, retinopathy, remodeling disorder, von Hippel-Lindau syndrome, diabetes and/or hereditary hemorrhagic telengiectasia.

23. A method of promoting angiogenesis in a tissue of a subject, the method comprising providing to the subject, a therapeutically effective amount of a peptide having an amino acid sequence selected from the group consisting of SEQ ID NOs: 2, 4, 6, 8, 10 and 12, said peptide being no more than 50 amino acid residues in length, to thereby promote angiogenesis in the subject.

24. The method of claim 23, wherein the subject suffers from arteriosclerosis, retinopathy, remodeling disorder, von Hippel-Lindau syndrome, diabetes and/or hereditary hemorrhagic telengiectasia.

25. A nucleic acid construct comprising a polynucleotide sequence encoding the peptide of claim 1.

26. The nucleic acid construct of claim 25, further comprising a promoter.

27. A nucleic acid construct comprising a polynucleotide sequence encoding the peptide of claim 5.

28. The nucleic acid construct of claim 27, further comprising a promoter.

29. A nucleic acid construct comprising a polynucleotide sequence encoding the peptide of claim 7.

30. The nucleic acid construct of claim 25, further comprising a promoter.

31. A composition for targeting a drug to endothelial cells, the composition comprising the drug fused to a peptide having an amino acid sequence as set forth in SEQ ID NO:13, 27 or 32, said peptide being at least 6 and no more than 50 amino acid residues in length.

32. The composition of claim 31, wherein the drug is selected from the group consisting of a toxin, a chemotherapeutic agent and a radioisotope.

33. A composition for targeting a drug to endothelial cells, the composition comprising the drug fused to a peptide selected from the group consisting of SEQ ID NOs: 2, 4, 6, 8, 10 and 12.

34. A composition for targeting a drug to endothelial cells, the composition comprising the drug fused to a peptide having an amino acid sequence selected from the group consisting of SEQ ID NOs: 2, 4, 6, 8, 10 and 12, said peptide being no more than 50 amino acid residues in length.

35. A method of identifying putative angiogenic molecules, the method comprising:

(a) providing endothelial cells having peptides bound thereto, each of said peptides having an amino acid sequence selected from the group consisting of SEQ ID NOs: 2, 4, 6, 8, 10 and 12, said peptide being no more than 50 amino acid residues in length; and

(b) identifying a molecule capable of displacing said peptides from said endothelial cells, to thereby identify putative angiogenic molecules.